

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of )  
)  
Revision of the Commission's )  
Rules To Ensure Compatibility )  
With Enhanced 911 Emergency )  
Calling Systems )  
)

CC Docket No. 94-102  
RM-8143

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**COMMENTS OF AT&T WIRELESS SERVICES, INC.**

AT&T Wireless Services, Inc. ("AT&T"), by its attorneys, hereby submits its comments on the Further Notice of Proposed Rulemaking ("Further Notice") in the above-captioned proceeding.<sup>1/</sup> As a leading provider of wireless services, AT&T has strongly supported the development and enhancement of 911 services.<sup>2/</sup> Nevertheless, AT&T urges the Commission to ensure its rules are implemented in a reasonable fashion. To this end, the Commission should not impose specific requirements on wireless carriers beyond Phase II until carriers have implemented and assessed automatic location information ("ALI") technology.

Moreover, no additional requirements should be imposed on the wireless industry without careful analysis of their costs and benefits. While AT&T supports consumer education with respect to E-911 service, unwieldy mandates should be avoided. Finally, carriers should not be

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<sup>1/</sup> In the Matter of Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 94-102, RM-8143 (rel. July 26, 1996) ("Order").

<sup>2/</sup> See, e.g., Comments of AT&T Corp., filed Jan. 9, 1995 ("AT&T Comments"); Reply Comments of AT&T Corp., filed March 17, 1995 ("AT&T Reply Comments").

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required to route calls to the strongest control signal, nor should handset manufacturers be forced to adopt new standards.

- I. THE COMMISSION SHOULD CAREFULLY WEIGH THE COSTS OF ANY NEW MANDATES PRIOR TO IMPOSING THEM ON WIRELESS CARRIERS**
  - A. THE COMMISSION SHOULD ALLOW CARRIERS TIME TO DEVELOP AND TEST AUTOMATIC LOCATION INFORMATION TECHNOLOGY BEFORE IMPOSING ADDITIONAL MANDATES**

The Commission proposes that covered carriers develop the means to identify and report to Public Safety Answering Points ("PSAPs") the location of any wireless 911 caller within a radius of forty feet, using longitude, latitude, and vertical location data, for ninety percent of the 911 calls processed.<sup>3/</sup> However, despite claims to the contrary, the necessary technology is not available at this time to support these additional requirements.<sup>4/</sup> Because the technology has not yet been developed, the costs to upgrade ALI technology and to include vertical location information are unknown.

In addition, achieving vertical accuracy will present serious technical problems and it is questionable whether sea level measurements can be performed at all. Vertical information will not be of use to emergency response personnel unless it provides an extreme degree of accuracy. For example, the knowledge that a caller is between the 10th and 50th floor of a building may not enhance rescue efforts. Indeed, a person in a building will almost always have a landline phone available. The Commission should encourage location technology improvements, but not impose specific accuracy requirements on carriers.

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<sup>3/</sup> Order at ¶¶ 138-39.

<sup>4/</sup> Although there are claims that such technology exists, it has not yet been tested on a wide-scale basis nor shown to be practicable.

For these reasons, any guidelines issued at this time would be speculative at best. The Commission should therefore not issue specific requirements for additional location accuracy requirements to follow the initial five-year period. Instead, such improvements should be considered a few years into the development of first phase ALI technology, when AT&T and other carriers will be better positioned to evaluate ALI improvement standards.<sup>5/</sup>

While AT&T agrees with the general principle that carriers should improve the accuracy of location technology, the Commission should weigh the degree of accuracy obtained from any new requirements against the reasonableness of the costs expended to achieve that degree of accuracy.<sup>6/</sup> When evaluating the reasonableness of any additional costs, the Commission should take into account the taxes and fees already imposed on wireless subscribers.

#### **B. A MINIMAL LATENCY PERIOD IS NOT COST-EFFECTIVE**

The Commission seeks comment regarding the development of a minimum latency period "to ensure that public safety personnel are informed of callers' locations in time to act on the emergencies they confront."<sup>7/</sup> While the development of a minimum latency period may prove be of some occasional benefit, the costs of such a proposal is likely to be excessive. AT&T cannot assess such a requirement because, as noted above, the development of ALI technologies

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<sup>5/</sup> Currently, AT&T is not aware of any large scale demonstration that first phase ALI exists and it will be difficult to anticipate any technological improvements until some of the location solutions have been deployed on a large scale. It is also nearly impossible to gauge the cost of improvements to this technology let alone of the cost of the technology itself.

<sup>6/</sup> AT&T agrees, in principle, to reporting requirements tracking technology developments with respect to ALI. Order at ¶ 143. However, simplicity should govern the development of such requirements. AT&T would also welcome Commission participation in industry fora that address this issue.

<sup>7/</sup> Order at ¶ 142.

is still at an early stage. Depending on the future availability of suitable technology, the Commission could instead have PSAPs signal to the network to reconnect to callers and obtain periodic location updates. This alternative would likely be available on a call-by-call basis. In any case, no minimum latency requirement should be imposed until the technology is further developed.

## **II. A FAIR COST RECOVERY MECHANISM MUST BE IN PLACE BEFORE ANY ADDITIONAL MANDATES ARE IMPOSED**

In order to achieve balance between the benefits and the costs of any new requirements, costs must be recoverable from all beneficiaries of wireless E-911 services, including those beyond the wireless subscriber base. The Commission should provide incentives to carriers in developing and deploying ALI improvements by establishing a national cost recovery mechanism.

In addition, cost recovery must be competitively neutral and designed to ensure that all who benefit from wireless E-911 support its costs. Such mechanisms should not be allowed to create a competitive impact. AT&T cannot comment as to whether state and local cost recovery mechanisms could accommodate these additional ALI costs because such mechanisms have not been established and ALI costs are unknown.

## **III. THE COMMISSION SHOULD FOCUS ON REASONABLE 911 SERVICE ACCESS PROPOSALS**

### **A. "STRONGEST SIGNAL" PROPOSALS ARE MISGUIDED**

AT&T does not agree with the proposal that 911 calls be sent to the cellular system with the strongest control channel signal.<sup>8/</sup> Such a requirement would not ensure call completion.

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<sup>8/</sup> Order at ¶ 144.

In urban areas the strongest signal may not be the best -- or even the nearest -- because signals often reflect off buildings and other structures. In this situation, known as "multi-path scattering," a true signal reading cannot be obtained.

A "strongest signal" requirement may also prove impractical because moving a cellular phone merely a few centimeters can cause a variance in the strongest signal. Also, technical compatibility problems such as incompatible air interface standards are on the horizon with PCS deployment and it is likely that all phones will not have the ability to access all providers. Finally, the cell site with the strongest signal may not have a channel available.

For the above reasons, a "strongest signal" proposal is misguided. Instead, AT&T recommends that the Commission focus on call completion in both urban and rural areas. In rural areas, the Commission could also require that carriers send 911 calls to the "best available signal" for each subscriber's device. AT&T believes that further study will be required regarding air interface compatibility as well as device configuration to enable 911 caller access to all wireless systems.<sup>2/</sup> Such a study should be left to industry.

**B. INDUSTRY SHOULD BE ALLOWED TO FURTHER DEVELOP 911 ACCESSIBILITY**

AT&T agrees with the Commission's goal of achieving 911 coverage in those areas where wireless service is available. However, access to all service providers is an unduly burdensome requirement. AT&T believes that 911 availability will continue to increase as the competitive wireless market promotes ubiquitous coverage. If all phones were required to access all wireless systems -- all air interface technologies and all different bands -- compliance would

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<sup>2/</sup> See Order at ¶ 147.

require new phone development, significant revisions to phones under design, and replacement of approximately forty million existing phones. Furthermore, the development of a common protocol to achieve this goal is untimely, as CDMA and TDMA have already been deployed. In general, wireless customers can currently access at least two carriers per market. When PCS is deployed and air interface standards are compatible, AT&T Wireless customers who use dual-mode, dual-band phones will be able to switch between compatible cellular and PCS service.

No modification of the cellular handset is required and no requirement should be imposed on the handset manufacturer to ensure that a cellular customer can access either system in a given market. The default setting on cellular phones is generally A or B preferred, but access to the other system is attempted if the preferred system cannot be accessed. Customer education is required to ensure that customers are aware of the consequences of disabling access to the other carrier in any given market.

**C. THE COMMISSION SHOULD NOT REQUIRE CARRIERS TO FORWARD CALLS THAT DO NOT TRANSMIT A CODE IDENTIFICATION**

AT&T reiterates its opposition to the Commission's proposal that, where requested by PSAPs, covered carriers be required to transmit 911 calls from wireless handsets that do not transmit a code identification.<sup>10/</sup> This requirement makes little sense, is contrary to the weight of evidence in the record, and will harm the implementation of E-911 services. By the Commission's reasoning, wireline carriers should also be required to connect 911 calls placed

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<sup>10/</sup> Order at ¶ 149. See Petition for Reconsideration of AT&T Wireless Services, Inc., filed Sept. 3, 1996.

from telephones that have been disconnected.<sup>11/</sup> Moreover, the Commission has acknowledged that requiring all 911 calls to be forwarded -- even if the mobile handset lacks a code identification -- presents difficult technical problems for service providers.<sup>12/</sup> In light of the concerns expressed in the record, this requirement is not "a reasonable response to a problem that the agency was charged with solving."<sup>13/</sup>

### **III. WIRELESS CARRIERS SHOULD HAVE THE FLEXIBILITY TO PROVIDE TAILORED CONSUMER EDUCATION PROGRAMS**

The Commission should not issue specific mandates regarding customer education about wireless E-911. Rather, carriers should determine how this is best accomplished. A national mandate from the Commission may impede effective and appropriate communication. AT&T regularly communicates with its customers via bill inserts and customer mailings and such communications would be the likely vehicles for 911 education.

With regard to specific areas of E-911 education, AT&T believes that the following key issues should be conveyed to customers:

- changing the pre-set phone preference from A or B preferred may result in an inability to access 911;
- the phone should not be turned off once 911 is dialed because the public safety operator may need call back;

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<sup>11/</sup> Service disconnection may be attributable to a number of legitimate reasons, from consumer choice to repeated failure to pay a bill. As AT&T has already made clear, it makes no sense to analogize mobile handsets to "pay telephones" and impose on wireless subscribers the costs that are usually imposed on providers of pay phones. See Order at ¶ 37.

<sup>12/</sup> Id. at ¶ 38.

<sup>13/</sup> Schurz Communications, Inc. v. FCC, 982 F.2d 1043, 1049 (7th Cir. 1992) (Posner, J) (citing Bowen v. American Hosp. Ass'n, 476 U.S. 610, 626-27 (1986) (plurality opinion)).

- due to technological limitations, the location information transmitted to the public safety operator will not provide specific location; and
- callers should re-attempt calls if a busy signal is received.

Handset labeling requirements are not necessary to encourage users to set their handsets to access more than one wireless system. Labeling would be both confusing to the customer as well as inaccurate. For example, because of the different air interface standards for PCS, even if a phone was programmed to access all carriers, it would not have the ability to do so.

As discussed above, customer education materials should be provided by the wireless carrier. No equipment labeling or packaging insert requirements should be imposed. Some wireless systems may need to provide slightly different messages to their customers in terms of wireless E-911 capabilities or limitations. Uniform requirements for equipment labeling or packaging inserts could accordingly prove to be inaccurate and confusing. AT&T believes that the public safety community has an appropriate and necessary role in developing and deploying an E-911 education program for its subscribers, and welcomes such assistance.



## CONCLUSION

For the foregoing reasons and as more fully set forth above, the Commission should adopt the positions set forth herein.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I, Tanya Butler, hereby certify that on this 25th day of September 1996, I caused copies of the foregoing "Comments of AT&T Wireless Services, Inc." to be sent by messenger(\*) to the following:

  
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